FINAL: 2021 SOFC Project Review Meeting - Virtual

EST	Day 1 - Tuesday, November 16, 2021			
11:00 AM	Welcome and Introduction: Shailesh Vora, SOFC Technology Manager, NETL, DOE			
11:05 AM	Welcome from FECM: Sam Thomas, Division Director, Hydrogen with Carbon Management, Office of Fossil Energy and Carbon Management, DOE			
11:10 AM	Overview of SOFC Program: Shailesh Vora, SOFC Technology Manager, NETL, DOE			
11:30 AM	Question & Answer			
11:40 AM	Break			
		Moderator:	Patcharin Burke	
	Organization	Project Number	Title	Presenter
11:50 AM	FuelCell Energy	FE31648, FE31639, Cost report on FE26199 and FE27584	Progress in SOFC Technology Development at FuelCell Energy	Hossein Ghezel-Ayagh
12:20 PM	Break			
12:40 PM	Special Power Sources, LLC	FE31674	Next Generation Durable, Cost Effective, Energy Efficient Tubular Solid Oxide Fuel Cell	Ted Ohrn and Rich Goettler
1:00 PM	Lunch Break			
		Moderator:	Sarah Michalik	
2:00 PM	University of California - San Diego	FE26211	Innovative, Versatile and Cost-Effective Solid Oxide Fuel Cell Stack Concept	Nguyen Minh
2:20 PM	Tennessee Technological University	FE31187	Development & Validation of Low-Cost, Highly-Durable, Spinel-Based Contact Materials	Jiahong Zhu
2:40 PM	West Virginia University	FE31665	Chromium Tolerant, Highly Active and Stable Electrocatalytic Internal Surface Coating for Cathode of Commercial Solid Oxide Fuel Cells (SOFCs)	Xueyan Song
3:00 PM	University of Connecticut	FE0031647	Multi-Constituent Airborne Contaminants Capture and Mitigation of Cathode Poisoning in Solid Oxide Fuel Cell	Prabhakar Singh
3:20 PM	Break			
		Moderator:	Jason Montgomery	
3:30 PM	Worcester Polytechnic Institute	FE31652	Computationally Guided Design of a Multiple Impurity Tolerant Electrode	Yu Zhong
3:50 PM	University of Louisiana at Lafayette	FE31667	Explore the Role of Interlayer Chemistry on the Cathode Performance and Performance Stability	Xiao-Dong Zhou
4:10 PM	Michigan State University	FE31672	High-Performance Circuit Pastes for Solid Oxide Fuel Cell Applications	Jason Nicholas
4:30 PM	University of North Dakota, Energy & Environmental Research Center	FE31977	Solid Oxide Fuel Cell Technology Development	Chad A. Wocken
4:50 PM	University of North Dakota, Energy and Environmental Research Center (UNDEERC)	DE-FE0024233-5.1	Solid Oxide Fuel Cell Development and Demonstration Test Center	Chad A. Wocken
5:10 PM	Adjourn			

	Day 2 - Wednesday, November 17, 2021			
11:00 AM	Welcome, Introductions, and Meeting Approach: Shailesh Vora, SOFC Technology Manager, NETL, DOE			
		Moderator:	Debalina Dasgupta	
	Organization	Project Number	Title	Presenter
11:05 AM	National Energy Technology Laboratory (NETL)	FWP1611054	Solid-State Electrochemical Cell R&D Progress at NETL	Greg Hackett
11:25 PM	National Energy Technology Laboratory (NETL)	FWP1022460	Solid Oxide Fuel Cell and Electrolyzers for Integrated Energy System	Sam Bayham
11:45 PM	Pacific Northwest National Laboratory (PNNL)	2 FWPs (66841 and 68820)	SECA Core Technology Program and Small Scale SOFC Test Platform	John Hardy and Brian Koeppel
12:05 PM	Argonne National Laboratory (ANL)	FWP27327	Reliable Evaluation of SOFC Cathodes - The Effect of Thickness and Contact Spacing	Brian Ingram
12:25 PM	Oak Ridge National Laboratory (ORNL)	FEAA121	Microstructural Evolution of Engineered Glass Seals after 40,000 Hours Exposure in SOFC Relevant Environments	Edgar Lara-Curzio
12:45 PM	Lunch Break			
		Moderator:	Jason Montgomery	
2:00 PM	Aris Energy Solutions LLC	FE31978	Modular Fuel Cells for Data Centers and Other Critical Power Users	Dan Connors and Kieth Spitznagel
2:20 PM	Redox Power Systems, LLC	FE31976	Low Cost Solid Oxide Fuel Cells for Small-Scale Distributed Power Generation	Bryan Blackburn and Stelu Deaconu
2:40 PM	Cummins, Inc.	FE31941	Improving Cost and Efficiency of the Scalable SOFC Power System	Thangaraj Mathuraiveeran
3:00 PM	Break			
		Moderator:	Evelyn Lopez	
3:10 PM	FuelCell Energy, Inc. (FCE)	FE31974 and FE32032	Performance Improvements for Reversible Solid Oxide Fuel Cell Systems	Hossein Ghezel-Ayagh
3:30 PM	Pacific Northwest National Laboratory	FWP	Low Cost, Large Area SOFC Stach for H2 and Chemicals Production	Olga Marina
3:50 PM	Saint-Gobain Ceramic Materials	FE31972	Reversible SOFC-SOEC Stacks Based on Stable Rare-Earth Nickelate Oxygen Electrodes	John Pietras
4:10 PM	Adjourn			

	Day 3 - Thursday, November 18, 2021			
11:00 AM	Welcome, Introductions, and Meeting Approach: Shailesh Vora, SOFC Technology Manager, NETL, DOE			
		Moderator:	Diane Revay Madden	
	Organization	Project Number	Title	Presenter
11:05 AM	Phillips 66 Company	FE31975	A Highly Efficient and Affordable Hybrid System for Hydrogen and Electricity Production	Ying Liu
11:25 AM	NexTech Materials, Ltd.	FE31986	Versatile Reversible Solid Oxide Cell System for Hydrogen and Electricity Production	Emir Dogdibegovic
11:45 AM	Cummins	FE31971	Cummins Reversible-Solid Oxide Fuel Cell System Development	Lars Henrichsen
12:05 PM	Idaho National Laboratory and OxEon Energy	HQ	INL-OxEon Tean Performance Validation of a Thermally Integrated 50 KW High Temperature Electrolyzer System	Tyler Westover and Jenna Pike
12:25 PM	University of California, San Diego	FE31940 and FE32107	Efficient, Reliable, and Cost-Competitive Solid Oxide Cell Technology for Hydrogen and Electricity Production	Nguyen Minh
12:45 PM	Lunch Break			
		Moderator:	Drew O'Connell	
2:00 PM	Massachusetts Institute of Technology	FE32102	Improving Durability and Performance of Solid Oxide Electrolyzers by Controlling Surface Composition on Oxygen Electrodes	Bilge Yildiz
2:20 PM	OxEon Energy, LLC	FE32105	Development of Stable Solid Oxide Electrolysis Cell for Low-Cost Hydrogen Production	S. Elango Elangovan
2:40 PM	West Virginia University	FE32112	Designing Internal Surfaces of Porous Electrodes in Solid Oxide Electrolysis Cells for Highly Efficient and Durable Hydrogen Production	Xueyan Song
3:00 PM	Mohawk Innovative Technology. Inc.	FE27895 and SC20793	High Temperture Anode Recycle Blower for Solid Oxide Fuel Cell	Jose Luis Cordova
3:20 PM	Break			
		Moderator:	Sarah Michalik	
3:30 PM	University of South Carolina	FE32111	Developing Stable Critical Materials and Microstructure for High-Flux and Efficient Hydrogen Production through Reversible Solid Oxide Cells	Kevin Huang
4:00 PM	Georgia Tech	FE32115	Durable and High-Performance SOECs Based on Proton Conductors for Hydrogen Production	Meilin Liu
4:20 PM	Worcester Polytechnic Institute	FE32116	Heterostructured Cr Resistant Oxygen Electrode for SOECs	Yu Zhong and Wenyuan Li
4:40 PM	University of Louisiana at Lafayette	FE32110	Development of High-Performance Solid Oxide Electrolysis Cells and Diagnois Methods	Xiao-Dong Zhou, Henry Chu and Yudong Wang
5:00 PM	Adjourn			